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July, 241+

Anti-Trust and Federal Control, K. Kitts,
FM, July, 245+

IBM, Justice, and the Industry Structure,
S. Eglash, FM, Sept., 285+

If Cogar Can Keep from Being Suited Up,
J. Wessler, NS, Oct., 147+

The Mice, FM, Nov., 478

LEASING

Third Party Leasing from a User's View-

point, A. Burke, FA, Nov., 143+

LEGAL IMPLICATIONS
 BR, July, 189+
 Some Legal Aspects of Commercial Remote Access Computer Services, R. Bigelow, FA, Aug., 48+
 Conference Considers Software Legal Issues and It's Good News Two to One, P. Hirsch, NS, Nov., 357+

LIBRARIES
 BR, Aug., 211+
 The Annual ASIS Meeting, W. Eshelman, CR, Dec., 183+

LOGISTICS
 See: Inventory Control

MACRODATA
 What Costs Less Than \$20 and Has the Compute Power on an IBM 704?
 R. McLaughlin, NS, Dec., 198+

MAINFRAMES
 See: Computers; Computers, New

MAINTENANCE
 Computer Systems Maintenance, R. Riggs, FA, Nov., 227+

MANAGEMENT
 Obsolescence in Business Organization and Management, R. Head, FA, Jan., 29+
 Making the Most of a Merger Bid, E. Fillion, FA, Jan., 47+
 BR, Jan., 161+
 Computer System Standards for a Large Organization, B.W. Fritz, FA, Feb., 39+
 How Not to Choose an EDP System, T. Scharf, FA, April, 73+
 BR, May, 203+
 Let's Hear It for the User, L. Marienthal, ER, June, 41+
 The Computer and Functions of Management, C.R. Rhind, FA, June, 43+
 Computer Project Selection in the Business Enterprise, M. Schwartz, FA, June, 47+
 Data Processing's Evolving Place in the Organization, F. Withington, FA, June, 58+
 Business Time-Sharing: User Economics, J. Hammerton, FA, June, 70+
 BR, Sept., 262+
 Standards for Evaluating Data Processing Management, M. Spett, FA, Dec., 171+
 See Also: Management Information Systems

MANAGEMENT, DATA PROCESSING
 On-Time Systems Management, J. Connor, FA, April, 60+
 DYNET--A Dynamic Network Planning Technique, A. Becker, FA, April, 113+
 Dynamic Calculation of Dispatching Priorities Under OS/360 MVT, B. Marshall, FA, Aug., 93+

The Management System--A New Species of Software? M. Wilkes & D. Hartley, FA, Sept., 73+

An Experiment in DP Management--Revisited, W. Stuart, FA, Nov., 149+

Performance Evaluation of Third-Generation Computer Systems, H. Stang & P. Southgate, FA, Nov., 181+

When Should You Emulate? H. Lichstein, FA, Nov., 205+

Controlling the Programming Project, M. Mensh, FA, Nov., 233+

Standards for Evaluating Data Processing Management, M. Spett, FA, Dec., 171+

See Also: Data Processing Management Association, Performance Measurement, Personnel

MANAGEMENT INFORMATION SYSTEMS (MIS)
 Second Annual Management Meet Examines the Milieu of MIS, A. Pantages, NS, Feb., 106+
 Management Controlled Information Systems, D. Fisher, FA, June, 53+
 Teaching MIS at a British University, R. Tricker, FA, Sept., 76+

MATHEMATICS
 The Evolution of Number Systems, D. Knuth, FA, Feb., 93+
 BR, Aug., 211
 BR, Dec., 275+
 See Also: Gaming, Operations Research

MCCALL INFORMATION SERVICES CO.
 MISCO Starts Transition to T-S in Pursuit of \$1.3 Billion Market, A. Pantages, NS, March, 101+

MEDICAL
 The Bits and Pieces World of Medical EDP, W. Rolph, ER, May, 37
 Computer-Based Hospital Information Systems, J. P. Singer, FA, May, 38+
 Computers in Medicine, N. Reilly, FA, May, 46+
 On-Line Patient Monitoring System, J. Beaumont, FA, May, 50+
 Information Handling Costs in Hospitals, G. Jackson, FA, May, 56+
 Coordination of Medical Computing Programs, E. Gabrieli, CR, May, 117
 Medical Research Graphics, S. Davis, CR, May, 209
 Standardization of Medical Documentation, E. Gabrieli, FA, Aug., 103
 Toward a Medical Data Bank for a Total Population, M. Davies, FA, Nov., 257+

MEMORIES
 Semiconductor Memories: Evolution or Revolution, R. Graham, FA, June, 99+
 Sharp Practices Company Saving During Grace Period of Two Days, R. Forest, NS, Sept., 143

MERGERS & ACQUISITIONS

- Making the Most of a Merger Bid,
E. Fillion, FA, Jan., 47+
- Redcor Acquires Decade Computer; Borgers
Now Heads Combination, W. Rolph, NS,
Feb., 103+

MICROFILM

- Microfilm Retrieval in an Airline
Reservation System, R. Parsons, FA,
Sept., 103+

See Also: Computer Output Microfilm

MILITARY

- Safeguard Against Technopolitical
Glitches, R. Forest, ER, Aug., 37
- Surface Ship ASW Attack Trainer, SS,
Aug., 152+

See Also: Command & Control

MINICOMPUTERS

- See: Computers; Computers, New

MODELING

- See: Simulation and Modeling

MULTI-ACCESS SYSTEMS

- PL/I as a Tool for System Programming,
F. Corbato, FA, May, 68+

MULTIPROGRAMMING

- Optimizing Performance in a Multi-
Programming System, P. Howard, FA,
Jan., 65+

- Dynamic Calculation of Dispatching
Priorities Under OS/360 MVT,
B. Marshall, FA, Aug., 93+

NATIONAL CASH REGISTER CO.

- NCR Registers Increased Production,
Sales, Gets Into EDP Mainstream,
R. Forest, NS, Aug., 111+

NETHERLANDS

- Computer Use in the Netherlands,
W. deBruijn, FA, Sept., 45+

NEW ZEALAND

- See: Australia

NUMERICAL CONTROL

- Westinghouse is Sure It'll Be Westing-
house, A. Pantages, NS, May, 124+

OBSOLESCENCE

- On Obsolescence, Past and Future,
R. Forest, ER, Jan., 21+
- Obsolescence--A Panel Discussion, FA,
Jan., 23+
- Computer Obsolescence, L. Amdahl, FA,
Jan., 27+
- Obsolescence in Business Organization and
Management, R. Head, FA, Jan., 29+
- Obsolescence--People Plateaus, R. Patrick,
FA, Jan., 33+
- Obsolescence--Systems Software, P. Dorn,
FA, Jan., 35+

ON-LINE SYSTEMS

- BR, Feb., 179
- Credit Reporting System, SS, March, 148+
- On-Line Patient Monitoring System,
J. Beaumont, FA, May, 50+
- Immediate Access and the User Revisited,
M. Turoff, FA, May, 65+
- On-Line Graphics at the University of
Utah, S. Ogden & N. Wadsworth, FA,
Nov., 159+
- See Also: Computer Aided Design, Time-
Sharing

OPERATING SYSTEMS

- See: Software

OPERATIONS RESEARCH

- BR, Dec., 276+

OPLER, ASCHER

- Ascher Opler: 1916-1969, FA, April, 110+

OPTICAL CHARACTER RECOGNITION (OCR)

- Whither OCR? J. Rabinow, FA, July, 38+
- Optical Character Recognition--A Survey,
P. Andersson, FA, July, 43+
- OCR for Credit Card Processing,
J. Poitevent, FA, July, 49+
- OCR at Foremost Foods, R. McMindes, FA,
July, 53+

PATENTS

- See: Software Protection

PATTERN RECOGNITION

- See: Artificial Intelligence

PERFORMANCE MEASUREMENT

- Optimizing Performance in a Multi-
Programming System, P. Howard, FA,
Jan., 65+
- An Approach to Measuring a Time-Sharing
System, E. Yourdon, FA, April, 124+

PERIPHERALS

- Hard Copies from CRT Terminals, R. Rinder,
FA, April, 64+
- An Invention Born Late One Sunday Enters
Field as Plotters Thicken, R. Forest,
NS, June, 123+
- They Laughed When Viatron Sat Down at the
Keyboard, A. Pantages, NS, July, 109+
- Peripheral Equipment in Europe, D. Willis,
FA, Sept., 64+
- Key-to-Disc Systems: With Production
Starting, Marketeers Are in Full Cry,
J. Wessler, NS, Nov., 359+

PERSONNEL

- Obsolescence--People Plateaus, R. Patrick,
FA, Jan., 33+
- Old Programmers Must Never Die,
H. Bromberg, FM, March, 237+
- Testing for Programming Aptitude,
J. Wolfe, FA, April, 67+
- A Modest Proposal, T. Woods, FM, April,
338

- The Information System Model, L. Schruben, FA, July, 93+
- Computer Programs for People, J. MacGuffie, FA, Nov., 215+
- Applying COM to a Job Bank, W. Fogler & G. Benjamin, FA, Dec., 112+
- See Also: Schools, EDP
- PL/I
- PL/I as a Tool for System Programming, F. Corbato, FA, May, 68+
- PLOTTERS
- See: Peripherals
- POTTER INSTRUMENT CO.
- Magnetic Characters for Data Entry, J. Levine, FA, May, 81+
- PREPROCESSORS
- COAX: A Preprocessor for COBOL, R. Teague & A. Brady, FA, July, 69+
- PRINTERS
- See: Peripherals
- PRIVACY
- Privacy Is Not a Personal Thing; Maybe Orwell Was Right, R. McLaughlin, NS, April, 171+
- PROCESS CONTROL
- An Introduction to Process Computer Systems, A. Matherne, FA, Dec., 135+
- Glassmaking Control System, SS, June, 164+
- PROCUREMENT
- The Air Force COBOL Compiler Validation System, H. Hicks, FA, Aug., 73+
- WIMMIX: It's the Biggest, But Will It Be the Best? P. Hirsch, FA, Oct., 84+
- I Object, R. Patrick, FA, Oct., 93+
- BOB Re-Affirms Prime Contractor Concept, Encourages Multi-Vendor Buys, P. Hirsch, NS, Nov., 362+
- PROGRAMMERS
- See: Personnel
- PROGRAMMING
- BR, Aug., 211
- Controlling the Programming Project, M. Mensh, FA, Nov., 233+
- Palindromic Programming, W. Bernstein, FA, Dec., 123+
- See Also: Software
- PROGRAMMING LANGUAGES
- BR, Oct., 280
- See Also: Software
- PROGRAMS, COMPUTER
- See: Software
- PUBLISHING
- BR, April, 289+
- The COM Service Bureau, G. Marks, FA, Dec., 117+
- QUALITY ASSURANCE
- Quality Assurance Before the Fact--The Feasibility Story, R. Ouellett, FM, Dec., 291+
- RAILROADS
- See: Transportation
- RCA CORP.
- The RCA Spectra 70/60, R. McLaughlin, FA, March, 90+
- REAL-TIME SYSTEMS
- BR, Feb., 179
- Mini-Computers for Real-Time Applications, D. Theis & L.C. Hobbs, FA, March, 39+
- See Also: On-Line Systems
- RECOGNITION EQUIPMENT INC.
- OCR for Credit Card Processing, J. Poitevent, FA, July, 49+
- REDCOR CORP.
- Redcor Acquires Decade Computer; Borgers Now Heads Combination, W. Rolph, NS, Feb., 103+
- RELIGION
- EDP in Religious Organizations, E. Gruman & E. Dayton, FA, Jan., 50+
- REMOTE JOB ENTRY
- See: Input/Output
- RETAIL
- Checkless Society Missionary Expounds on Salvation at Retail Meet, R. Forest, NS, Oct., 145+
- SCHEDULING
- The Computer Art of Schedule-Making, M. Spitzer, FA, April, 84+
- SCHOOLS, EDP
- From the Welfare Rolls to Over \$7,000 a Year in Four Months, J. Eyler, NS, April, 175+
- The Washington State Penitentiary EDP School, G. Graham, FA, July, 85+
- If the Schools Won't, Will Honeywell? Yes, It Will, It Says, F.B. Nelson, NS, Oct., 148+
- A Program of Computer Operator Training for the Disadvantaged, P. Braverman, FA, Nov., 272+
- Training--A Big Submarket, E. Sigel, FA, Dec., 181+
- SEMICONDUCTOR TECHNOLOGY
- Semiconductor Memories: Evolution or Revolution, R. Graham, June, 99+
- SEPARATE PRICING
- IBM "Unbundles" Hardware/Services Charges ...Will Software Be Next? A. Pantages, NS, Jan., 69+
- Whither IBM? D. Brandon, ER, April, 59
- Software Firms Unwrap Packages and Hope for Presents from IBM, A. Dahl, NS, May, 128+
- The IBM Lawsuits--Two Comments, Anon. & F. Withington, FM, May, 283+
- A Look at Unbundling, A. Pantages, FA, June, 85+
- What Are IBM's Corporate Objectives?

M. Goetz, FM, June, 273
 The Biggest Software Company, D. Ferguson, FM, June, 273+
 Long-Term Impact on the Industry of the IBM Court Cases, H. R. Perot, FM, June, 276+
 It's Happened Before, J. Harrington, FM, July, 241+
 Consequences of Separate Pricing for Hardware and Software, L. Welke, FM, July, 247+
 Industry Reacts with Approval and Dismay as IBM Goes Separate Ways, A. Pantages, NS, Aug., 105+
 IBM, Justice, and the Industry's Structure, S. Eglash, FM, Sept., 285+
 Major Mainframers are a Caution in Reactions to Unbundling Specter, A. Dahl, NS, Nov., 361+

SERVICE BUREAUS

Westinghouse is Sure It'll Be Westinghouse, A. Pantages, NS, May, 124+
 Lawsuit Could Jar Service Bureaus by Setting Up "Strict Liability" Concept, W. Rolph, NS, July, 115+
 What's a 1401 Like You Doing in a Nice Place Like This? A. Pantages, NS, Sept., 137+
 The COM Service Bureau, G. Marks, FA, Dec., 117+

See Also: Computer Utility, Time-Sharing

SIMULATION AND MODELING

Second Conference on Applications of Simulation, J. Reitman, CR, Feb., 85+
 The Information System Model, L. Schruben, FA, July, 93+
 Mariner Test Facility, SS, July, 156+
 Surface Ship ASW Attack Trainer, SS, Aug., 152+
 St. Lawrence River Model, SS, Sept., 178+
 Apollo Trainers, SS, Dec., 252+

SOCIAL IMPLICATIONS

A Realistic Look at the Systems Approach to Social Problems, I. Hoos, FM, Feb., 223+
 From the Welfare Rolls to Over \$7,000 a Year in Four Months, J. Eyler, NS, April, 175+
 An Evolutionist Looks at Computers, G. Hardin, FA, May, 98+
 What's It All About, Alfie? R. Forest, ER, July, 37
 The Washington State Penitentiary EDP School, G. Graham, FA, July, 85+
 Peace Group Attacks at SJCC "Dialogue" Panel Session, F. B. Nelson, NS, July, 112+
 Songs of Automation VII--Letter to Prometheus, B. Beizer, FM, Oct., 316

A Program of Computer Operator Training for the Disadvantaged, P. Braverman, FA, Nov., 272+

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See Also: Privacy, Urban Systems

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Medical Research Graphics, S. Davis, CR, May, 209

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Obsolescence--Systems Software, P. Dorn, FA, Jan., 35+
 PL/I as a Tool for System Programming, F. Corbato, FA, May, 68+
 What are IBM's Corporate Objectives? M. Goetz, FM, June, 273
 The Biggest Software Company, D. Ferguson, FM, June, 273+
 COAX: A Preprocessor for COBOL, R. Teague & A. Brady, FA, July, 69+
 The Brave New World of Time-Sharing Operating Systems, A. Rosenberg, FA, Aug., 42+
 The Air Force COBOL Compiler Validation System, H. Hicks, FA, Aug., 73+
 The Management System--A New Species of Software? M. Wilkes & D. Hartley, FA, Sept., 73+
 Software Engineering, F. Bauer, CR, Oct., 189+
 Computer Programs for People, J. MacGuffie, FA, Nov., 215+
 APL Users Conference, K. Korn, CR, Nov., 344+
 Conference Considers Software Legal Issues and It's Good News Two to One, P. Hirsch, NS, Nov., 357+
 A Communication Facility for COBOL, H. Hicks, FA, Dec., 148+
 A Short Guide to the Wonderful World of COBOL, H. Edelman, FA, Dec., 161+
 See Also: Multiprogramming, Programming, Software Packages, Software Protection

SOFTWARE PACKAGES

Software Firms Unwrap Packages and Hope for Presents from IBM, A. Dahl, NS, May, 128+
 Software Packages in Europe--What do Users Think? J. Hampton, FA, Sept., 61+
 Implementing the Very Large Application--Software Package, D. Minini, FA, Dec., 141+

SOFTWARE PROTECTION

Software Patent Future Murky Despite Recent Court Decisions, P. Hirsch, NS, Jan., 78
 CCPA Reconsiders Patent Decision and Prater & Wei Wait 'Er and Pray, P. Hirsch, NS, April, 174+

Software Protection, M. Duggan, CR,
June, 113+
SPRING JOINT COMPUTER CONFERENCE (SJCC)
See: Conference Reports
STANDARD COMPUTER CORP.

Two Approaches to the Seventies,
R. McLaughlin, FA, Sept., 85+
STANDARDS

The Vital, Yawn, Stimulating Topic of--
Um, Ah--Standards, R. Forest, ER,
Feb., 21
Toward a Standard Standard, H. Bromberg,
FA, Feb., 22+
The Federal Government and Computer
Compatibility, J. Brooks, FA, Feb., 24+
The Need for ADP Standards in the Federal
Community, J. Cunningham, FA, Feb., 26+
Information Processing Standardization: An
Evaluation, A. Grove, FA, Feb., 29+
Computer System Standards for a Large
Organization, W.B. Fritz, FA, Feb., 39+
ASCII Final (Maybe) Version Speeds Slowly
to Final (Maybe) Approval, P. Hirsch,
NS, March, 102+
The Air Force COBOL Compiler Validation
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Standardization of Medical Documentation,
E. Gabrieli, FA, Aug., 103
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A Future for ECMA? D. Crayford, FA, Sept.,
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A Communication Facility for COBOL,
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STANFORD RESEARCH INSTITUTE

SRI Report on FCC Computer Inquiry
Supports Free Entry, Some Control,
P. Hirsch, NS, June, 126+
The FCC Computer Inquiry, D. Dunn, FA,
Oct., 71+

SURVEYS

Mini-Computers for Real-Time Applications,
D. Theis & L.C. Hobbs, FA, March, 39+
Optical Character Recognition--A Survey,
P. Andersson, FA, July, 43+
The Time-Sharing Users: Who Are They?
B. Szuprowicz, FA, Aug., 55+
File Management Systems: A Current
Summary, C. Byrnes & D. Steig, FA,
Nov., 138+
Selecting the Right COM Unit, G. Harmon,
FA, Dec., 102+
Voice Recognition and Response Systems,
C. Weitzman, FA, Dec., 165+

SYSTEM DEVELOPMENT CORP.

SDC Was a Nonprofit Organization and
Planned it That Way--But No Longer,
A. Dahl, NS, Sept., 131+

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R. McLaughlin, FA, Sept., 85+

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TIME-SHARING

High School Time-Sharing System, SS, Jan.,
148+
Conversational Computing for Housewives,
G. Hubbard, FA, March, 34+
MISCO Starts Transition to T-S in Pursuit
of \$1.3 Billion Market, A. Pantages,
NS, March, 101+
An Approach to Measuring a Time-Sharing
System, E. Yourdon, FA, April, 124+
ADAPSO Time-Sharing Symposium,
A. Pantages, CR, April, 165+
Business Time-Sharing: User Economics,
J. Hammerton, FA, June, 70+
The '69 Time-Sharing Gold Rush, R. Guise,
FA, Aug., 38+
The Brave New World of Time-Sharing
Operating Systems, A. Rosenberg, FA,
Aug., 42+
Some Legal Aspects of Commercial Remote
Access Computer Services, R. Bigelow,
FA, Aug., 48+
The Time-Sharing Users: Who Are They?
B. Szuprowicz, FA, Aug., 55+
The Pricing Dilemma, J. Hootman, FA,
Aug., 61+
Towards the Computer Utility: Evolution or
Revolution, R. Zani & W. Zani, FA,
Oct., 125+

GSA Mulls Prototype of Federal Time-
Sharing Centers in Atlanta, P. Hirsch,
NS, Oct., 150

How to Evaluate a Time-Sharing Service,
P. Dorn, FA, Nov., 220+

Westinghouse Computer Center to Integrate
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See: Conference Reports, Conferences

TRAINING

See: Schools, EDP

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The Computer Art of Schedule-Making,
M. Spitzer, FA, April, 84+
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The AAR Data Systems Division Conference,
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TRANSPORTATION, AIR

Airline Challenges for the Future,
S. Tipton, FA, March, 22+
The Outlook for Improved Passenger
Systems, G. Buchanan, FA, March, 24+
Dynamic System Design for Airlines,

W. Brandenburg, FA, March, 26+
See Also: Reservations Systems,
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UNIVAC

Were Early Giant Computers a Success?
H. Lukoff, FA, April, 77+
Three New Intermediates, R. McLaughlin,
FA, May, 111+
Univac-Sponsored Conference Gives Editors
the Word on Next Decade, R. Forest,
NS, Dec., 194+

UNIVERSITIES

Computer-Assisted Instruction: Some
Operational Aspects, R. Gordon, FA,
Jan., 37+
Consoles in the Cloisters, R. Needham,
FA, Jan., 59+
Computing at Stanford, E. Feigenbaum &
N. Nielsen, FA, Feb., 53+
The Management System--A New Species of
Software? M. Wilkes & D. Hartley,
FA, Sept., 73+
Teaching MIS at a British University,
R. Tricker, FA, Sept., 76+
On-Line Graphics at the University of
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UCC Enters Ring Against Bell with Nation-
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USERS

Let's Hear It for the User, L. Marienthal,
ER, June, 41+
Business Time-Sharing: User Economics,
J. Hammerton, FA, June, 70+
The Time-Sharing Users: Who Are They?
B. Szuprowicz, FA, Aug., 55+
Software Packages in Europe--What Do
Users Think? J. Hampton, FA, Sept., 61+
Users' Influence on Computer Systems
Design, M. Laver, FA, Oct., 107+
Third Party Leasing from a User's View-
point, A. Burke, FA, Nov., 143+
APL Users Conference, K. Korn, CR, Nov.,
344+

USSR

Soviet Computing, 1969: A Leap Into the
Third Generation? W. Holland, FA,
Sept., 55+
Avtomatizatsiya 69, CR, Sept., 89+

VIATRON COMPUTER SYSTEMS INC.

They Laughed When Viatron Sat Down at the
Keyboard, A. Pantages, NS, July, 109+

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Voice Recognition and Response Systems,
C. Weitzman, FA, Dec., 165+

WESCON

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Westinghouse is Sure It'll Be Westing-
house, A. Pantages, NS, May, 124+
Westinghouse Computer Center to Integrate
Varied Hardware, P. Hirsch, NS, Nov.,
263+

XYNETICS, INC.

An Invention Born Late One Sunday Enters
Field as Plotters Thicken, R. Forest,
NS, June, 123+

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